## Crysler, Ruby

From:

Crysler, Ruby

Sent:

Friday, November 18, 2016 8:57 AM

To:

Kidwell, JessicaL

Subject:

RE: McConnell AFB PBR: RTC: SS544 (SWMU 207) Draft RFI Report

Jesse,

Thanks for looking at the responses. Are you ok with their discussion about VI assessment at the air control tower?

Section 6.1, page 6-1 (Receptors and Exposure Pathways): The section states, "Based on current groundwater concentrations, surface conditions (predominantly paved and open-air), and the general absence of any structures (with the exception of the Control Tower), exposure via vapor intrusion or inhalation of CVOCs from groundwater at SWMU No. 207 is incomplete." The following issues are noted:		
a. Although the Control Tower is not a residential building, the EPA has broad authority and distinct responsibilities to assess and, if warranted, mitigate vapor intrusion in non- residential settings arising from a chemical release that causes subsurface contamination by hazardous, vapor-forming chemicals (EPA, 2015a). The Control Tower is an occupied building and should not be excluded from vapor intrusion assessment.	D	The cu A new incorp compli- config secon- intrusion
b. Although no shallow groundwater or soil gas sample has been collected near the Control Tower and no building configuration is available, current TCE concentrations in groundwater may pose a vapor intrusion concern to the Control Tower. Using the Vapor Intrusion Screening Level calculator (EPA, 2015b), an indoor air concentration of 7.43 micrograms per cubic meter is estimated based on a groundwater concentration of 26 μg/L (MW-179), a groundwater temperature of 18°C, and a commercial exposure scenario. The EPA Region 7 worker action level, based on potential fetal cardiac defects, is 6 μg/m³ for an acute exposure of 8 hours.	D	If the "commvapors Intrusifine-gr preser value both o
c. Although the Control Tower appears to be the only occupied building within the SWMU 207 boundary, occupied buildings are present downgradient of SWMU 207 and are underlain by chlorinated volatile organic compound plumes of sufficient concentration to pose vapor intrusion concern. Therefore, additional assessment of the vapor intrusion pathway, using multiple lines of evidence, is warranted at this site.	D	Respo Tower associ assess analys related SWML
Appendix D (Slug Test Analysis): The plots of normalized head data versus time for wells MW-49D, MW-50D, MW-178 and MW-180 are concave upward, a curvature that can make analysis by straight-line methods such as Bouwer and Rice (1976) ambiguous. Butler (1998) recommends matching Bouwer and Rice (1976) solutions to data within a normalized head range of 0.20 to 0.30 to minimize ambiguity associated with data curvature, and improve reliability of the data analysis. The employed slug test analysis software, AQTESOLV, is capable of superimposing recommended normalized head ranges on data plots to enhance visual curve matching. It is recommended that normalized head range be used or GSI should select an alternative analytical model appropriate for the formation and well installation.	D	The sl consid straight range D. Ho ranges order 1
RCRA 11/	18/2016	

Ruby Crysler Environmental Scientist EPA Region 7, AWMD/WRAP 11201 Renner Blvd Lenexa, KS 66219

From: Kidwell, JessicaL

Phone: 913-551-7409

Sent: Tuesday, October 11, 2016 12:00 PM To: Crysler, Ruby < Crysler.Ruby@epa.gov>

Subject: RE: McConnell AFB PBR: RTC: SS544 (SWMU 207) Draft RFI Report

Hi Ruby:

Thanks for sharing these with me. In general, the responses are acceptable; however, the following items may warrant a little clarification.

- Items 5 and 10 E. Section 2.3 will be revised to note the change in monitoring wells sampled. Less clear is
  whether Section 2.3 will be revised to discuss the basis for the replacement well locations or the historical
  groundwater analyses for hexavalent chromium at SWMU 207. These aspects of the response should be
  included in the report.
- Item 26 D.
  - Modification of the generic attenuation factor is appropriate, so long as the justification points to specific evidence of laterally-extensive, fine-grained soils beneath the building basement or foundation.
  - O Using the modified groundwater-to-indoor air attenuation factor (0.005) and a site-specific groundwater temperature (18°C), the calculated indoor air TCE concentration is 3.71 μg/m³. This calculated indoor air TCE concentration is below the EPA Region 7 worker action level of 6 μg/m³ based on an 8-hour exposure period. (Note that the facility continues to evaluate TCE vapor intrusion based on the target cancer risk and hazard quotient. EDAB hopes to share an R7 technical memorandum on the acute risks of TCE in air this week; action levels are specified within.)
- Items 14 and 27 D. Please note these responses, which attribute responsibility to Boeing.

Let me know if you have questions.

Thanks again, Jess

From: Crysler, Ruby

Sent: Wednesday, October 05, 2016 2:05 PM
To: Kidwell, JessicaL < Kidwell. JessicaL@epa.gov >

Subject: FW: McConnell AFB PBR: RTC: SS544 (SWMU 207) Draft RFI Report

Jesse,

McConnell response to EPA comments on the Draft SWMU 207 RFI report are attached. Please review them when you have time and let me know if their responses are satisfactory.

Thank you.

Ruby Crysler Environmental Scientist EPA Region 7, AWMD/WRAP 11201 Renner Blvd Lenexa, KS 66219

Phone: 913-551-7409

From: Wight, Brian [mailto:brian.wight@aecom.com]

**Sent:** Wednesday, October 05, 2016 1:46 PM **To:** Crysler, Ruby < <u>Crysler.Ruby@epa.gov</u>>

Cc: Jacqueline Grunau (jgrunau@kdheks.gov) < jgrunau@kdheks.gov>; Mark D. Wichman

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Subject: McConnell AFB PBR: RTC: SS544 (SWMU 207) Draft RFI Report

Ruby,

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URS/GSI responses to EPA's comments on the SS544 (SWMU 207) Draft RFI report are attached for your review and approval. If possible, please provide your approval on or before 14 October 2016. If this is not possible, please let us know when your approval may be received.

## **Thanks**

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